

## **REMARKS/ARGUMENTS**

### **1. Status of the Claims.**

In applicant's response filed October 10, 2006, Claims 21 and 24 were amended.  
Presently, Claims 21-26 are pending in the current application and no changes are made  
5 to the pending claims..

**2. Rejection of Claims 21, 21, 22 and 25 under 35 U.S.C. §103(a) as being  
unpatentable over Alexander et al. (US 6,177,931), in view of Ballantyne et al.  
(US 5,867,821) and further in view of Peifer et al. (US 5,987,519) should be  
10 withdrawn.**

#### **a. Claims 21 and 24: Alexander has been misapplied.**

The issue here is whether Examiner has properly applied the Alexander reference  
15 in rejecting certain elements of Claims 21 and 24. Applicants find that Alexander  
functions differently than the present invention as claimed and thus the reference has  
been misapplied.

In order to properly reject Claims 21 and 24 under §103(a) as being obvious, the  
prior art reference must, among other things, teach or suggest all the claim limitations.  
20 See MPEP §2143. In other words, in rejecting a claim for obviousness, the Examiner  
must find each element of the rejected claim to be either taught or suggested in the prior  
art reference or references in combination. However, in the present case the prior art of  
Alexander does not teach or suggest the claim limitations of Claims 21 and 24 as

contended by the Examiner. Therefore, the rejection of these claims under §103(a) is improper.

Examiner contends the language of Claim 21, and similar language of Claim 24, is disclosed by Alexander. The relevant elements of Claim 21 state:

5 a sensor for generating a real-time signal for transmission via the network interface, the real-time signal enabling such set-top apparatus to be classified in a promotional group for targeted messaging, whereby a promotional video stream is directed to the set-top apparatus adaptively in response to the real-time signal.

10 Specifically, Examiner contends that this claim language is disclosed in Alexander as a profile program, which collects user profile data and selects an advertisement based on the viewer profile, which represents a targeted advertisement, and displays the selected advertisement on the television screen. In other words, Examiner contends that the claim language of Applicants' invention is disclosed by the profile program of Alexander,  
15 which directs advertisements to the viewer based on profile data collected from the profile program.

Here it is important that the Examiner understand that the method of targeted messaging or advertising by Applicants' claimed invention is distinguishable over the targeted advertisement functionality of Alexander. In the prior art reference, the viewer  
20 profile analysis program (the "Profile Program") initially captures information about the viewer in an ongoing basis. *See* Alexander, Col. 29, lines 12-67. Next, after some time of observing and acquiring data regarding a viewer's behavior (i.e., acts of recording, watching, or internet activity), the Profile Program performs simple statistical analysis  
25 and "learns" a "Viewer Preference." For example, it is described that if the Profile Program detects that the viewer is watching a number of basketball games, and the

program analyzes what teams are being watched, it may then determine over time whether the viewer is a fan of a particular basketball team. The Profile Program however must observe the behavior of a viewer *over time* in order to utilize statistics and make a determination about a viewer's profile (i.e., "*Over time*, with sufficient data, the EPG characterizes the viewer's sense of humor, chronological age, activity age, whether the viewer is married ...," Alexander, Col. 30, lines 29-37). In the example stated above, the program would not be able to determine whether the viewer is a fan of particular team after merely watching just one game. Rather, the program must observe the viewer *over time* as he or she watches a statistically significant set of basketball games in order to make a determination about a viewer's profile. Thereafter, Viewer Profile information is used to customize the presentation of advertisements. See Alexander, Col. 32, lines 22-54.

In contrast to Alexander, the method of targeted messaging or advertising of Applicants' Claims 21 and 24 is carried out through the use of a personal biological sensor signal. The sensor signal is more closely connected to the user as compared to the "Profile Program" of Alexander. In Applicants' claim language, the sensor signal is generated by a closely connected *personal biological sensor*. The sensor is claimed as "generating a real-time signal." The generation of such user information is done instantaneously without need to collect data over time coupled with the additional step of statistical analysis, as required by the program in Alexander. In comparing the two methods of generating user data, the Profile Program of Alexander must capture information about the user on an ongoing basis, and thereafter perform simple statistical analysis in order to generate user data for targeted messaging. In contrast, the method of

Claims 21 and 24 utilizes a personal biological sensor to generate real-time data about a patient user for the ultimate goal of targeted messaging. The differences between Alexander and Applicants' invention is even more evident if one examines the type of data being sampled from the user.

5           In Alexander the Profile Program samples the viewer's interaction with the television, the EPG (electronic programming guide), and the Internet. Specific monitored activities include the number of times that the viewer interacted with the EPG during a particular viewing session, performed particular types of interactions with the EPG, watched a particular channel, interacted with the Internet during a particular viewing  
10 session, interacted with a particular website, etc. *See* Alexander, Col. 29, lines 37-55. These monitored activities are then used as a basis for running simple statistical analysis to generate viewer profile data. In summary, the method of Alexander monitors a wide variety of types of interaction scenarios between the viewer and the television. This data is then analyzed statistically to generate a user profile, which is then used to send targeted  
15 messages. In contrast, the personal biological sensor of Applicants' claimed invention serves to monitor organic material, such as genetic sequence data of DNA or the protein of a subject client. *See* Applicants' Specification, page 14, lines 15-19. This highly personal monitored characteristic, being the actual biological material of the user patient, is then used as a basis by which to send targeted messaging. Here it is stressed that  
20 personal biological sensor data monitoring method is of Applicants' invention is distinguishable over merely monitoring the television use-patterns of Alexander.

Another distinguishing characteristic of Applicants' invention is the adaptive nature of the targeted messaging. The claim language of Claim 21 and similar language

of Claim 24 state “a promotional video stream is directed to the set-top apparatus  
*adaptively* in response to the real-time signal.” The real-time signal here is the same  
signal previously discussed above as being generated by the personal biological sensor.  
The important aspect of the invention is that the signal may change from time to time and  
5 the claim language allows the video stream (i.e., targeted message) to be adaptive in  
response to the changing real-time signal. For example, while monitoring a certain  
protein of a user patient, the levels of the protein may fluctuate and thus cause the  
biological sensor to generate a fluctuating real-time signal, which ultimately dictates the  
content of the promotional video stream. Here, the video-stream is claimed to be directed  
10 “adaptively” in response to the changing real-time signal. This adaptive characteristic of  
targeted messaging is not found in the text of Alexander. The prior art must utilize the  
Viewer Profile program and carry out statistical analysis of user behavior in order to send  
out targeted messaging. If user behavior is altered, it will take the statistical method of  
Alexander considerably more time to realize a change in the user profile and  
15 subsequently a longer time will be required to rearrange the sending of targeted  
messaging. The method of Alexander must monitor a viewer’s change in habit over a  
statistically significant number of tasks in order to properly indicate a change in the user  
profile. This is due to the limitation of acquiring data *over time*.

With the mention of this distinguishing characteristic of the adaptive nature of the  
20 claimed invention, Applicants attempt to persuade the Examiner as to the differing  
functionality of Alexander as compared with the language of Claims 21 and 24.  
Additionally, Applicants have mentioned other important distinguishing characteristics as  
the generation of personal biological sensor data as compared with the statistical analysis

of Alexander's viewer profile program. Therefore, Alexander functions differently than the language of Claims 21 and 24. Examiner has improperly applied Alexander and thus has not met the burden for rejecting the claims under §103(a). Applicants respectfully request the timely allowance of Claims 21 and 24.

5

**b. Claims 21, 22, 24 and 25: Alexander is *non-analogous art*.**

The issue here is whether the prior art reference of Alexander is analogous prior art for the purpose of analyzing the obviousness rejection by Examiner. Applicants find that Alexander is non-analogous art and that the rejection of Claims 21, 22, 24 and 25 based upon the §103(a) obviousness combination of Alexander, Ballantyne and Peifer must therefore be withdrawn.

To establish an obviousness rejection under §103(a), the Examiner must establish that the combining or modifying of the teachings of the prior art to produce the claimed invention is possible through some teaching, suggestion, or motivation to do so, and such evidence is found in the references themselves or in the knowledge generally available to one of ordinary skill in the art. *See In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). Additionally, to rely on a reference under §103(a), it must be analogous prior art. *See* MPEP §2141.01(a). For the purpose of analyzing obviousness, analogous prior art is defined as a reference either "in the field of the Applicants' endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992).

In response to Applicants' arguments filed October 10, 2006, Examiner attempts to prove that the prior art is analogous by discussing the field of Ballantyne. *See* Office Action 12/27/2006, page 4-5. Specifically, Examiner discusses that Ballantyne discloses a medical system involving a PCS (patient care station), where normal CATV signals are received by the PCS (patient care station) through the CATV tuner/converter, with Video On Demand (VOD) requests. Also, Examiner points out that a regular coaxial network is provided for the connection to the PCS to serve CATV and VOD. In other words, the Examiner emphasizes that Ballantyne utilizes typical cable TV technology to implement the PCS. Examiner argues that this is the field of Ballantyne's invention. Thereafter,

Examiner concludes:

it would have been obvious at the time of the invention to use a standard [set-top] box as disclosed by Alexander et al and receive promotion video from said setup box since both operate on the standard TV network.

Here, Examiner argues that since Alexander discloses a standard set-top box, which operates on the standard TV network, it is analogous art with Ballantyne, which also operates on the standard TV network. Examiner is attempting to prove that both Alexander and Ballantyne are prior art references which pertain to the field of standard TV technology. However this argument is flawed.

To properly state that prior art is analogous, for the purposes of §103(a), the prior art must be "in the field" of *Applicant's* endeavor or be reasonably pertinent to the "particular problem" with which *Applicant* was concerned. *See In re Oetiker*, 977 F.2d at 1446. Examiner makes none of these factual inquiries. Rather, Examiner incorrectly compares the fields of the *prior art references* of Alexander and Ballantyne to argue that they would have been obvious combinations. Examiner does not bring sufficient proof

that Alexander and Ballantyne are “in the field” of Applicants’ endeavor, as required by the definition of analogous art.

Furthermore, the field of Applicants’ invention is unrelated to that of Alexander. In Applicants’ Specification, the Field of Invention is described as “networked computer applications, particularly to distributed client-server software for adaptive direct group transaction.” *See* Specification, page 2. In more focused terms, the claim language of Claims 21 and 24 describe the present invention as method and device for clinical diagnosis of patients via personal bio-sensors, which communicate with a database and display targeted messages and information via a digital TV. From this language, it is understood that the field of Applicants’ invention is medical IT (information technology) with applications to patient diagnosis via bio-sensors and targeted messaging. In contrast, the Field of Invention of Alexander is disclosed as relating to “television systems” and particularly to the “display of, and recoding control interface with, television programs, video, advertising information and program scheduling information.” Alexander, Col. 1, lines 35-40. In other words, Alexander relates to an electronic TV guide. Applicants’ stress that the field of electronic TV guides is unrelated to the field of medical IT and therefore that Alexander is non-analogous prior art.

Additionally, the prior art reference of Alexander is not reasonably pertinent to the particular problem with which Applicants’ invention was concerned. The problem concerning Applicants’ invention is disclosed as solving the limitations of prior-art approaches in distributed applications between client and servers for enabling direct messaging for multiple targets or client groups. *See* Specification, page 2, lines 6-13. More specifically, Applicants’ invention solves the problem of the utilization of a



personal bio-sensors to diagnose patient conditions and direct targeted messaging based on such sensor data. *See* Claims 21 and 24. This is unrelated to the problem of Alexander, which is disclosed as solving the limited viewer interaction capabilities of electronic program guides (EPG) by improving display, navigation, parental control, commercial advertising opportunities, creation of a viewer's profile, etc. Alexander, Col. 1, line 41-Col. 2, line 21. The improvement of EPG interaction of Alexander is *not* reasonably pertinent to the particular problem of personal bio-sensor diagnosis, with which Applicants' invention is concerned. Therefore, the prior art reference is non-analogous prior art.

In conclusion, the Examiner has attempted to bring proof that prior art references are analogous prior art for the purposes of §103(a). However, the proof is insufficient as Examiner has merely compared the fields of invention of Ballantyne and Alexander. The correct approach must be to compare the prior art with either the "field of *applicant's* endeavor" or show prior art which is "reasonably pertinent to the particular problem with which the *inventor* was concerned." *In re Oetiker*, 977 F.2d at 1446. Examiner has carried out neither of these factual inquiries. Furthermore, Applicants' have found that Alexander is neither related to the field of Applicants' invention nor reasonably pertinent to the particular problem with which the Applicants' invention was concerned. Therefore, Alexander is non-analogous prior art and unreliable as a reference for the purpose of analyzing obviousness under §103(a). *See* MPEP §2141.01(a). Examiner has failed to state a *prima facie* case obviousness and the rejection of Claims 21, 22, 24 and 25 must be withdrawn and these claims should be allowed.

3. **Rejection of Claims 23 and 26 under 35 U.S.C. §103(a) as being unpatentable over Alexander et al. (US 6,177,931), in view of Ballantyne et al. (US 5,867,821), in further view of Peifer et al. (US 5,987,519), and further in view of Hill et al. (US 5,857,155) should be withdrawn.**

5

For the reasons set forth above, the Examiner has not properly brought a *prima facie* case of obviousness for the combination of Alexander, Ballantyne and Peifer.

Additionally, Alexander has been show to be non-analogous prior art. Therefore, the rejection of Claims 23 and 26 under §103(a) must be withdrawn and these claims should

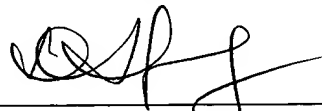
10 be allowed.

### CONCLUSION

For these reasons, Applicant(s) believe all pending claims 21-26 are in condition for allowance. If the Examiner has any questions pertaining to this application of feels that a telephone conference would in any way expedite the prosecution of this application, please do not hesitate to call the undersigned at (650) 325-4999.

Applicant(s) respectfully request that a timely Notice of Allowance be issued in this case.

Respectfully Submitted,



Dennis S. Fernandez, ESQ.  
Reg. No. 34,160

Date: 2/27/2007

Fernandez & Associates, LLP

Customer No. 22877

Phone: (650) 325-4999

Fax: (650) 325-1203